

APA711Hu04 100µg
Active Heparanase (HPSE)
Organism Species: *Homo sapiens (Human)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

12th Edition (Revised in Aug, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Leu151~Ile543

Tags: N-terminal His-tag

Purity: >90%

Traits: Freeze-dried powder

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.

Original Concentration: 200µg/mL

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 10.0

Predicted Molecular Mass: 48.0kDa

Accurate Molecular Mass: 48kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

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LLREHYQKKF  KNSTYSRSSV  DVLYTFANCS  GLDLIFGLNA  LLRTADLQWN  
SSNAQLLLDY  CSSKGYNISW  ELGNEPNSFL  KKADIFINGS  QLGEDFIQLH  
KLLRKSTFKN  AKLYGPDVQV  PRRKTAKMLK  SFLKAGGEVI  DSVTWHHYYL  
NGRTATKEDF  LNPDVLDIFI  SSVQKVFQVV  ESTRPGKKVW  LGETSSAYGG  
GAPLLSDTFA  AGFMWLDKLG  LSARMGIEVV  MRQVFFGAGN  YHLVDENFDP  
LPDYWLSLLF  KKLVGTKVLM  ASVQGSKRK  LRVYLHCTNT  DNPRYKEGDL  
TLYAINLHNV  TKYLRLPYPF  SNKQVDKYL  RPLGPHGLLS  KSVQLNGLTL  
KMVDDQTLPP  LMEKPLRPGS  SLGLPAFSYS  FVIRNAKVA  ACI
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[ACTIVITY]

Heparanase (HPSE) selectively cleaves heparan sulfate at specific sites on heparan sulfate proteoglycans (HSPGs). HPSE facilitates cell migration associated with metastasis, wound healing and inflammation. An increase in its activity is associated with an increase in VEGF activity, which further enhances angiogenesis. HPSE also enhances shedding of syndecans and increases endothelial invasion and angiogenesis in myelomas. It acts as a procoagulant by increasing the generation of activation factor X in the presence of tissue factor and activation factor VII. In addition, it increases cell adhesion to the extracellular matrix (ECM), independent of its enzymatic activity. HPSE is highly expressed in placenta and spleen and weakly expressed in lymph node, thymus, peripheral blood leukocytes, bone marrow, endothelial cells, fetal liver and tumor tissues.

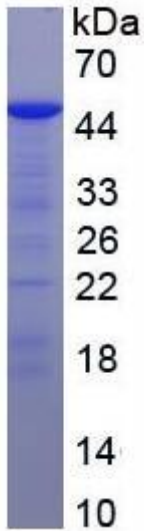


Figure 2. SDS-PAGE

Sample: Active recombinant HPSE, Human

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.